



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/695,459

10/29/2003

Taro Suzuki

YTO-004

4579

20374 7590 07/24/2007
KUBOVCIK & KUBOVCIK
SUITE 710
900 17TH STREET NW
WASHINGTON, DC 20006

EXAMINER

SCHLIENTZ, LEAH H

ART UNIT

PAPER NUMBER

1618

MAIL DATE

DELIVERY MODE

07/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/695,459

Applicant(s)

SUZUKI ET AL.

Examiner

Leah Schlientz

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 14-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13 and 35-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement of Receipt

Applicant's Response, filed 4/30/2007, in reply to the Office Action mailed 11/28/2006, is acknowledged and has been entered. Claims 1 – 37 are pending, of which claims 1 – 10 and 14 – 34 are withdrawn from consideration at this time as being drawn to a non-elected invention. Claims 11 and 35 have been amended. Claims 11 – 13 and 35 – 37 are readable upon the elected invention and are examined herein on the merits for patentability.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 12/6/2006 was filed after the mailing date of the Office Action mailed 11/28/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

Applicant's arguments filed 4/30/2007 have been fully considered but they are deemed non-persuasive for reasons set forth below.

Claim Rejections - 35 USC § 102

The rejection of claims 11 and 35 under 35 U.S.C. 102(b) as being anticipated by Suh *et al.* (US 6,117,440) is MAINTAINED for reasons of record in the office action mailed 11/28/2006.

Applicant asserts that the composition of Suh is sprayed on a cloth and dried to form a film comprising the polymer, whereby people are prevented from contact with the mites and their dejections, and so Suh does not intend that the allergens are inhibited by the polymer as it is. Applicant further contends that the composition is not intended to decrease the allergens as they are, for example, dead bodies or feces of the mites.

Applicant's arguments are non-persuasive because Suh practices the same method steps which are instantly claimed, and thus inherently accomplishes the same method (i.e. an aromatic hydroxyl compound was supplied in an object where allergens (i.e. mites, and thus allergens associated therewith) exist or are to be, and thus the same result must be accomplished (i.e. denaturing or adsorption), whether or not such properties were explicitly stated. A chemical composition and its properties are inseparable.

The rejection of claims 11 – 13 under 35 U.S.C. 102(e) as being anticipated by Mckechnie *et al.* (US 2004/0198625) is MAINTAINED for reasons of record in the office action mailed 11/28/2006.

Applicant asserts that the composition of Mckechnie decomposes soils and undesirable microorganisms by photocatalytic action. Polyvinyl phenol is added for forming a film, as in Suh, but is not added for inhibiting allergens.

Applicant's arguments are non-persuasive because Mckechnie practices the same method steps which are instantly claimed, and thus inherently accomplishes the same method (i.e. polyvinyl phenol was supplied in an object where allergens (i.e. mites, and thus allergens associated therewith) exist or are to be, and thus the same result must be accomplished (i.e. denaturing or adsorption), whether or not such properties were explicitly stated. A chemical composition and its properties are inseparable.

The rejection of claims 11 – 13 and 35 – 37 under 35 U.S.C. 102(e) as being anticipated by Hikada *et al.* (JP 59-100715) is MAINTAINED for reasons of record in the office action mailed 11/28/2006.

Applicant asserts that Hikada describes an antibacterial active synthetic fiber comprising poly-p-vinylphenol, and that the inhibition of allergens and antibacterial activity are quite different from each other. Applicant provides a definition for allergen as "a general term for substances that cause atopy or allergy, or a substance that causes an allergic reaction." Applicant asserts that the present invention denatures

Art Unit: 1618

allergens such as the feces or dead bodies of panther mites or adsorbing them to inhibit reactivity with specific antibodies of the allergens, and that "antibacterial activity" refers to "a property for inhibiting proliferation of bacteria or killing bacteria." Applicant contends that the use of antibacterial agent kills bacteria and thereby generates dead bodies of bacteria, however does not necessarily give the same action to the dead bodies of the bacteria, and the number of allergens is increased due to the dead bodies of bacteria which possibly causes the allergic symptom.

Applicant's arguments are non-persuasive because it is noted that the claims are very broad and are drawn to denaturing or adsorbing allergens by supplying an aromatic hydroxyl compound (poly-p-vinylphenol). The claims do not limit the allergen to any specific type of allergen (i.e. allergens such as the feces or dead bodies of panther mites), as recited in the Response. Hikada teaches antibacterial activity with the claimed compound. Bacteria are capable of eliciting an immune response and thus are within the scope of allergens, as claimed. Accordingly, because Hikada practices the same method steps which are instantly claimed, and Hikada would inherently accomplish the same method (i.e. polyvinyl phenol was supplied in an object where allergens exist or are to be, and thus the same result must be accomplished (i.e. denaturing or adsorption), whether or not such properties were explicitly stated. A chemical composition and its properties are inseparable.

New Grounds of Rejection

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodfolk *et al.* (*J. Allergy and Clinical Immunology*, 1994, 94, p. 19 – 26 (abstract)).

Woodfolk *et al.* discloses that tannic acid (i.e. a polyphenol, an “aromatic hydroxyl compound”) is a protein denaturing agent that has been reported to reduce allergen levels in house dust and is marketed for such purpose as 1% and 3% solutions. The effects of tannic acid on dust allergens by using monoclonal antibody-based ELISAs for mite and cat allergens were investigated. The ability of tannic acid to denature cat allergen Fe1 d 1 demonstrated an 80% reduction in allergen and reduced dust mite Der p 1 and Der f 1 levels by 89% and 96%, respectively (abstract). Accordingly, Woodfolk meets the instant claim limitations, as the step of supplying an aromatic hydroxyl compound is performed, and allergens are denatured.

Conclusions

No claims are allowed at this time.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

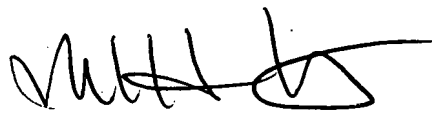
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leah Schlientz whose telephone number is 571-272-9928. The examiner can normally be reached on Monday - Friday 8 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHS



MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER